

L Number	Hits	Search Text	DB	Time stamp
1	5	ruzga.in.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:34
2	62424	photon\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:34
3	49	micro adj photon\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:34
4	84	(micro adj photon\$3) or microphoton\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:44
5	0	((micro adj photon\$3) or microphoton\$3) and scintillat\$5	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:45
6	42951	scintillat\$	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:45
7	12	scintillat\$ same (optical near5 switch\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:51
8	627	scintillat\$ same gat\$3	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:53
9	2178	scintillat\$ same (mirror\$2 or reflect\$3)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:54
10	87	scintillat\$ same ((mirror\$2 or reflect\$3) near5 array\$1)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 15:58
11	464	(250/368).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 16:18
12	797	((250/366) or (250/367)).CCLS.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 16:19
13	0	("11not12").PN.	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 16:19
14	300	((250/368).CCLS.) not (((250/366) or (250/367)).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM_TDB USPAT;	2003/08/25 16:20

15	633	((250/366) or (250/367)).CCLS.) not ((250/368).CCLS.)	USPAT; US-PGPUB; EPO; JPO; DERWENT; IBM TDB	2003/08/25 16:35
17	173	scintillat\$ same multiplex\$3		2003/08/25 16:50
18	54593	optic\$2 near5 switch\$3		2003/08/25 16:50
19	122	(optic\$2 near5 switch\$3) and scintillat\$3		2003/08/25 16:51

DERWENT-ACC-NO: 2002-262676

DERWENT-WEEK: 200231

COPYRIGHT 1999 DERWENT INFORMATION LTD

TITLE: Optical system for microchemical analysis systems, has optical waveguide which transmits light from light source to detecting unit or light from detecting unit to detector, and connects optical switch and detecting unit

PATENT-ASSIGNEE: SUMITOMO ELECTRIC IND CO [SUME]

PRIORITY-DATA: 2000JP-0158134 (May 29, 2000)

PATENT-FAMILY:

PUB-NO	PUB-DATE	
LANGUAGE	PAGES	MAIN-IPC
JP 2001337083 A	005	December 7, 2001
		G01N 031/20
		N/A

APPLICATION-DATA:

PUB-NO	APPL-DESCRIPTOR	APPL-NO
APPL-DATE		
JP2001337083A	N/A	
2000JP-0158134	May 29, 2000	

INT-CL (IPC): G01N021/27, G01N021/64, G01N021/77,  
G01N031/20

ABSTRACTED-PUB-NO: JP2001337083A

BASIC-ABSTRACT:

NOVELTY - An optical system for microchemical analysis systems, consists of an optical waveguide. The optical waveguide transmits light from light source to a detecting unit or light from detecting unit to a detector, and connects an optical switch (16) and the detecting unit.

USE - As optical system for micro chemical analysis systems used for laser induced fluorescence, absorptiometry, chemiluminescence measuring method or scintillation and proximity assay (claimed). Also for performing photometric analysis of micro amount sample. For analysis system of micro-total analysis system (micro-TAS), or a micro reactor used in biotechnology, environmental measurements and fine chemicals.

ADVANTAGE - Optical system performs high speed processing of the micro chemical analysis systems.

DESCRIPTION OF DRAWING(S) - The figure shows the model of micro chemical analysis system utilizing the optical system.

Micro fluid chip 11

Optical fiber 13

Optical switch 16

CHOSEN-DRAWING: Dwg.2/5

TITLE-TERMS: OPTICAL SYSTEM ANALYSE SYSTEM OPTICAL  
WAVEGUIDE TRANSMIT LIGHT  
LIGHT SOURCE DETECT UNIT LIGHT DETECT UNIT  
DETECT CONNECT OPTICAL  
SWITCH DETECT UNIT

DERWENT-CLASS: B04 D16 J04 S03

CPI-CODES: B11-C07B3; B11-C07B4; B11-C09; D05-H09;  
J04-B01A;

EPI-CODES: S03-E04A1; S03-E04D; S03-E04E; S03-E09D;

CHEMICAL-CODES:

Chemical Indexing M6 \*01\*  
Fragmentation Code  
M905 Q233 R511 R514 R521 R528

SECONDARY-ACC-NO:

CPI Secondary Accession Numbers: C2002-078144

Non-CPI Secondary Accession Numbers: N2002-204193

[0019] Drawing 5 shows the system suitable for performing chemiluminescence measurement or a scintillation pro squeak tee assay. In order that this system may measure the luminescence itself, the light source is not necessarily required. After the micro fluid chip 31 which has two or more flow cells or capillary tubes which are a detecting element-ed, the electrode holder 32 which has a micro lens is formed. Two or more optical fibers 33 are connected to the electrode holder 32. An electrode holder 32 holds each optical fiber 33 in the position of each \*\*\*\*\* (each flow cell or each capillary tube). The structure of holding an optical fiber 33 is the same as that of what is shown in drawing 3 . The nose of cam of an optical fiber 33 counters a detecting element-ed in order to take in luminescence from a sample. The other end of the optical fiber 33 by which the end was combined with the electrode holder 32 is connected to an optical switch 36. All the optical fibers 33 connected to the electrode holder 32 are connected to the optical switch 36. An optical switch 36 is connected with detection equipment 39 (photo multiplier) by optical-fiber 33'. Each cell of a micro fluid chip or luminescence from each capillary tube is led to detection equipment 39 through an optical fiber 33 according to the change mechanism of an optical switch 36 to suitable timing.